## KINSHIP AND MARRIAGE.

Kinship and Marriage in Early Arabia. By the late W. Robertson Smith. New Edition, with Additional Notes by the Author and by Prof. I. Goldziher, Budapest. Edited by Stanley A. Cook, M.A. Pp. xxii+324. (London: A. and C. Black, 1903.) Price 10s. 6d.

THIS new edition of a masterly work should be welcomed by all who take an interest in the study of primitive man, a study which, it is no paradox to say, has more practical bearing than academic history on the social problems of the future. Before his death Robertson Smith made corrections and added notes to the first edition of 1885, which are now incorporated. As anthropologists and orientalists know, the essay is an application of the theories of J. F. McLennan to early Arabia, conducted with the originality, insight, logical clearness and brilliance of exposition which are inseparable from the name of Robertson Smith.

Beginning with an exposure of the easy methods of the Arabian genealogists, he proceeds to argue that "female kinship" was once the rule. The strong Arab sense of blood-unity "can only have come from female kinship" and from a state of society where children were reckoned to the tribal kin, but not to a particular father. He regards the mota marriages, common in the time of Mohammed, as a last relic of McLennan's beena marriage, in which the husband goes to live with his wife's people. This system of beena or sadica marriage with female kinship and totemism was broken up by the growth of the idea of the family (dar), the result being male kinship and baal marriage, in which the husband has "dominion." The change was made through "marriage by capture," followed by marriage by purchase. But there is also to be explained the acceptance of male kinship in a state of society where there was "no notion that man should keep his wife strictly to himself." The only possible explanation lies, the author thinks, in Tibetan polyandry, in which a group of brothers bring to their common home a This must have been preceded by common wife. Nair polyandry, in which a group of brothers is entertained in her home by a common wife. The whole doctrine of the paternal system implies that this polyandry was quite widely spread. Lastly, bars to marriage before Islam were made on female kinship alone; the early Arabians and northern Semites possessed totemism and exogamy.

How far the author might have modified his conclusions is an idle speculation. Criticism of one who has taught us all is especially invidious in the case of a book which in substance is nearly twenty years old. But it is only fair to science to point out that recent research has found grave objections to McLennan's theory of social development and to many of his "universal institutions" themselves. Much also of McLennan's evidence was bad; the author quotes (p. 98) one of his examples of "marriage by capture," which is nothing of the kind. The best authorities contradict the statement on p. 262 as to the prevalence of such "marriage" in Australia, and that on p. 267 as to "marriage by capture" being followed by

exogamy. Objections may be raised to the suggestion that beena marriage with adoption into the woman's kin are proved by Genesis ii. 24—"a man shall leave his father and mother and shall cleave unto his wife, and they two shall be one flesh"; to the old idea that early man considered animals to be men in disguise; to the view that the Arabs "practised" cannibalism, and that "promiscuous" behaviour at religious feasts is a survival of polyandry; and to the acceptance of metronyms in the genealogies as proofs of female kinship, while patronyms are rejected.

Recent speculation, however, is but beginning to reconstruct the development of the primitive social organism. The great value of this book is to prove that the early Semites followed the same lines of development, whatever they were, as other races, and to provide the best exposition of the prevalent theory.

ERNEST CRAWLEY.

## SYLVICULTURE.

Schlich's Manual of Forestry. Vol. ii. Sylviculture. Third edition. Pp. viii+393. (London: Bradbury, Agnew and Co., Ltd., 1904.) Price 8s. net.

N NATURE of July 23, 1891 (vol. xliv. p. 265), Sir Dietrich Brandis, K.C.I.E., reviewed the first edition of the above volume. He then prophesied a great future for Prof. Schlich's work. prophecy was not a vain one has been amply proved by the test of time. The book reached the second edition in 1897, and has now passed into the third. There is no preface to this edition, but the arrangement of the former editions has, on the whole, been retained; however, the subject-matter has been somewhat differently classified. The present volume consists of four parts-each part is divided into chapters and sections, which are further subdivided as occasion demands. Part i. deals with the foundations of sylviculture—this was formerly part iv. of vol. i. of the "Manual." Part ii. comprises the formation and regeneration of woods. Part iii. is devoted to the tending of woods, while part iv. consists of sylvicultural notes on British forest trees.

The author has condensed a marvellous amount of information into a small space. At the same time, each subject is dealt with at sufficient length to be quite intelligible to the student and practical forester. This is largely due to the admirable way in which Prof. Schlich has arranged his matter. One subject leads on quite naturally to another, so that there is no needless repetition and overlapping.

The author assumes that the student has already made some progress in other branches of science upon which sylviculture depends—" the forester requires to be well acquainted with the manner in which soil and climate act on forest vegetation, in order to decide in each case which species and method of treatment are best adapted, under a given set of conditions, to yield the most favourable results. The detailed consideration of the laws which govern this branch of forestry finds a place in the auxiliary sciences, such as physics, chemistry, meteorology, mineralogy and geology." Why not botany? especially plant physiology, the bed-rock upon which true scientific sylviculture must be founded. It has been for long a criti-

cism of foresters in this country that they are insufficiently acquainted with the life and form of plants -with botany, in fact-and the pages of this book seem to justify the criticism, at least there is occasionally a looseness of expression regarding botanical points which should not appear in a manual for students such as this. Take, for instance, the statement, "the atmosphere overlying the soil furnishes certain nourishing substances-heat, light and moisture" (p. 7), or again, "certain plants (Leguminosæ) can take nitrogen direct from the air by means of tubercles or nodules" (p. 11). The mention of the name Acacia up to p. 52 of the book instead of False-Acacia is botanically wrong and misleading, and the statement that elm does not ripen its seed in the north of England (p. 66) is also wrong because botanically unqualified. The identification of mistletoe with Loranthus europoeus (p. 324) is, we take it, a slip.

As regards sylviculture the book has been entirely brought up to date, and is eminently practical and suggestive. It may, with every confidence, be warmly recommended alike to the student, landed proprietor, forester and nurseryman. All doubtful or controversial matter has been carefully avoided, and every view stated, or method recommended, is founded upon the author's own direct observation and experience, as well as on that of others.

The various sylvicultural systems are clearly and concisely described, and their advantages and disadvantages amply criticised, so that the forester need have no difficulty in choosing the one best suited to his own locality and the objects of management. In the important sections dealing with the raising of plants in the nursery, much valuable and useful advice is given. The ultimate success of a wood depends, to a large extent, upon the health and vigour of the plants from which it originated—hence it is very important that young seedlings should be grown and handled with the greatest possible care. On p. 191, Prof. Schlich gives a timely warning to nurserymen in regard to the pernicious practice of laying down seedlings, when they are pricked out, into shallow trenches, involving the bending of the root-system to one side-a defect from which the tree does not recover for many years. He says, "unless nurserymen give up that vicious practice they must be prepared to see landed proprietors revert to the system of home nurseries."

Part iv. of the volume is replete with information. In fact, it is a condensed volume on sylviculture in itself. The notes on the Douglas Fir have been considerably extended, but in regard to the fungus enemies of this species, *Phoma Douglasii* might have been included, as this disease has been known in Scotland now for several years.

ENGINEERING IN SOUTH AFRICA.

The Engineer in South Africa. By Stafford Ransome, M. Inst. C. E. Pp. xx+319. (Westminster: Archibald Constable and Co., Ltd., 1903.) Price 7s. 6d.

A T the close of the war the author was appointed by the *Engineer* to visit all the British possessions in Africa south of the Zambesi River, and to write frankly and fully to that journal on the various problems which

have been evolved by recent events. The result was a series of articles on "South Africa from an Engineer's Point of View." These articles were of a highly interesting nature, and were much appreciated at the time.

The volume before us combines the most interesting portions of these articles with much additional matter as well as most of the illustrations. Mr. Ransome is well known as a successful author of books of this type, and we are not surprised at the able way he handles the subject.

Any man seriously thinking of going to South Africa, be he an artisan or a trained engineer, should most certainly obtain a copy of this book; the information given on the cost of living and travelling, as well as on the prospects of employment, is very much to the point.

Chapter vi. deals with the labour question, a sul ject very much to the fore at the present time. author, after pointing out the prohibitive cost of white unskilled labour, discusses three alternatives, which are as follows: -(1) the importation of Asiatic labour; (2) the trusting to Providence to induce the Kaffir to work; (3) the taking of measures to make the Kaffir work, his conclusion being that the third alternative should be adopted, and that legislation should be introduced to this end. Chapter xiii. deals with the theory and practice of the railways, one of the most interesting in the book. The railway mileage at present open for traffic is 5457, under construction 2636, making a total of 8093 miles. Our author has much to say about the long delivery and high prices paid for railway plant when ordered in Britain, and no doubt has formed these views from conversations with men on the spot; he also compares American delivery of such material to our detriment. It is only fair to point out that the average locomotive built in Britain for these railways is the most expensive of its kind: its design usually emanates from the colony, and the locomotive builder here has to do what he is told. On the other hand, the American locomotive builder works with a much freer hand in every way. supplies what he thinks best, and is not handicapped by a rigid specification; no wonder he can deliver sooner!

Judging from chapter xiv.; the harbours of British South Africa are in a bad way, more especially those in Cape Colony, where for political reasons their development has been remarkably slow; and the author very reasonably argues that since the majority of imports are likely to be for the Transvaal, the harbours further up the coast are more likely to develop in the future; this applies to the Port of Natal, Durban.

Mr. Ransome gives us an excellent description of diamond mining in Kimberley in chapter xvi., tracing the development of the De Beers Company from the commencement, and explaining the various methods from beginning to end, and the same can be said of chapter xvii., which has for its subject "Underground at the Rand Mines:"

This volume is of interest to all connected with South Africa, and Mr. Ransome may be congratulated on the production of so excellent a book.

N. J. L.